

Rhodora

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THE NEW ENGLAND BOTANICAL CLUB

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"VERONICA" IN NORTH AND SOUTH AMERICA

FRANCIS W. PENNELL

(Continued from p. 22.)

II. *VERONICA* L., Subgenus 2. *EUVERONICA* Pennell

Veronica L., Sp. Pl. 9. 1753. Type species, *V. officinalis* L.,⁷ of Europe.

A. Capsule pubescent. Stems, pedicels, leaves and sepals pubescent. Leaf-blades oval or ovate, crenate-serrate to dentate. Plants of dry soil.

Leaf-blades dentate, cordate or truncate at base.

Sepals 3.5-5 mm. long, linear-lanceolate, exceeding the capsule. Capsule with hairs not glandular nor dark-jointed. Plant ascending or erect.

Sepals unequal, the longest 4-5 mm. long. Capsule slightly notched. Style 4-5 mm. long, longer than the capsule. Leaf-blades sessile or nearly so. Racemes over 10-flowered, the pedicels more than 1 mm. long.

Corolla 7-8 mm. long, violet-blue, the largest lobes ovate. Anterior sepals much exceeding the posterior. Capsule longer than wide. Racemes 30-60-flowered, the pedicels scarcely exceeding their bracts. Leaf-blades coarsely dentate. Stem erect, 4-8 dm. tall.....18. *V. latifolia*

Corolla 5-6 mm. long, paler violet-blue, the largest lobes nearly orbicular. Anterior sepals slightly exceeding the posterior. Capsule wider than long. Racemes 10-20-flowered, the pedicels much exceeding their bracts. Leaf-blades crenately dentate. Stem ascending, 1-3 dm. tall....19. *V. Chamaedrys*.

Sepals equal or nearly so, 3.5-4 mm. long. Capsule deeply notched, wider than long. Style

⁷ Selected, among the several species common to both Linné and Tournefort, which answer Linné's generic characterization in *Genera Plantarum*, ed. V. 10. 1754, and are native to Linné's country Sweden, because of its official nature. This species had a long historic right to the name "Veronica."

- .5 mm. long, much shorter than the capsule. Leaf-blades shortly petioled. Racemes 5-10-flowered, the pedicels less than 1 mm. long. 20. *V. javanica*.
- Leaf-blades oval, crenate-serrate, narrowed to a petiolar base. Sepals 2-3 mm. long, oblong-lanceolate, shorter than the capsule. Capsule as wide or wider than long, notched, with hairs dark-jointed and some of them glandular. Style 2.5-3.5 mm. long, shorter than the capsule. Plants repent, ascending at apex.
- Corolla 8-9 mm. long, violet-blue. Capsule 5 mm. long, as wide as long, its lobes rounded, the most distal point of each midway between the style and the lateral margin. Racemes 3-5-flowered, the pedicels longer than the capsule. Leaf-blades about 2 cm. long, crenate-serrate with very low teeth, hirsute above, glabrous beneath, conspicuously ciliate. Stem less than .5 dm. long. 21. *V. grandiflora*.
- Corolla 3-4 mm. long, pale-lavender, with lavender blue lines on the posterior side. Capsule 3-4 mm. long, wider than long, its lobes with the most distal point of each near the lateral margin. Racemes 20-30-flowered, the pedicels shorter than the sepals or capsules. Leaf-blades 2-5 cm. long, crenate-serrate with prominent teeth, pubescent on both surfaces but not obviously ciliate. Stem extensively repent, 2 dm. long or longer. 22. *V. officinalis*.
- A'. Capsule glabrous or with a few minute gland-tipped hairs. Stems, pedicels, leaves and sepals glabrous, or very rarely pubescent. Leaf-blades oblong-ovate to linear, finely serrate to entire. Aquatics.
- B. Capsule not conspicuously wider than long, and scarcely or not two-lobed. Sepals nearly or quite equaling the capsule, slightly unequal, the anterior longer. Leaf-blades oblong-ovate to lanceolate, obtuse to acuminate, serrate to crenate-serrate. Stem glabrous or pubescent with minute gland-tipped hairs. Racemes usually of more than 10 flowers, the relatively stout pedicels ascending-spreading.
- Leaf-blades all petioled, prevailing ovate-oblong, acutish to obtuse. Racemes usually 10-25-flowered, the pedicels 5-13 mm. long. Plants mainly emersed, glabrous throughout. Capsule slightly wider than long, notched.
- Leaf-blades oblong-oval, widest at or above the middle, narrowed at base, mostly broadly rounded at apex. Style 1.5-2 mm. long, obviously shorter than the capsule. Plant extensively repent, ascending at apex. 23. *V. Beccabunga*.
- Leaf-blades lanceolate to ovate, widest at or near the base, mostly acute or acutish at apex. Style 2-3 mm. long, scarcely shorter than the capsule. Plant repent only at base, soon ascending-erect. 24. *V. americana*.

Leaf-blades, at least the upper on the flowering-stems, sessile and clasping, obtuse to acuminate. Racemes 15–60-flowered, the pedicels 3–8 mm. long. Plants of deeper water, usually mostly submersed.

Capsule 2.5–4 mm. long. Style 1.3–2 mm. long.

Cauline leaf-blades acute to acuminate.

Sepals acute to acuminate. Capsule scarcely wider than long, not or slightly notched.

Leaf-blades serrate with close teeth (four or more to 1 cm.). Racemes usually 30–60-flowered, with pedicels 4–8 mm. long.

Stem distally, rachis and pedicels glabrous.

Capsule globose-ovoid, acutish or rounded, not or scarcely emarginate.

Style 1.5–2 mm. long. Leaf-blades oblong-ovate, mostly broadest about the middle, the lower usually obviously narrowed at base or petioled.

Sepals acuminate, 4–5 mm. long. Capsule 3–4 mm. long. Pedicels 5–8 mm. long. 25. *V. Anagallis-aquatica*.

Sepals acute, 2.5–4 mm. long. Capsule 2.5–3 mm. long. Pedicels 3–5 mm. long. 25a. *V. Anagallis-aquatica Brittonii*.

Stem distally, rachis and pedicels finely pubescent with minute gland-tipped hairs. Capsule nearly globose, slightly emarginate. Style 1.3–1.5 mm. long. Leaf-blades lanceolate, mostly broadest near the base, all obviously clasping. 26. *V. glandifera*.

Sepals obtuse to acutish. Capsule obviously wider than long, evidently notched. Leaf-blades crenate-serrate with remote teeth (two to three to 1 cm.), lanceolate, all clasping. Racemes usually 15–30-flowered, the pedicels 3–6 mm. long.

Stem distally, rachis and pedicels glabrous.

Style 1.4–1.6 mm. long. 27. *V. catenata*.

Stem distally, rachis and pedicels finely pubescent with minute gland-tipped hairs. Style 1.5–1.8 mm. long

27a. *V. catenata glandulosa*.

Capsule 2 mm. long, globose, not or scarcely notched. Style .7–1 mm. long. Cauline leaf-blades oblong-lanceolate, obtuse or obtusish. Stem distally, rachis and pedicels usually pubescent with minute gland-tipped hairs. 28. *V. undulata*.

B'. Capsule much wider than long, strongly two-lobed.

Sepals shorter than the capsule, equal. Leaf-blades linear or lanceolate, remotely setaceous-toothed or entire. Stem glabrous or pubescent with glandless hairs. Racemes 5–20-flowered; the filiform pedicels reflexing in fruit. 29. *V. scutellata*.

18. *VERONICA LATIFOLIA* L.

Veronica latifolia L., Sp. Pl. 13. 1753. "Habitat in Helvetia, Bithynia." The identity of this species has been much disputed, on one side being such statements as Bentham in DC., Prod. 10: 469. 1846, who considers it to be a broad-leaved form of *V. Teucrium* L., on the other Kerner in Oesterr. Bot. Zeitschr. 23: 367-369. 1875, who makes a strong plea for its identification as *V. urticaefolia* Jacq., Fl. Austr. 1: 37. pl. 59. 1773. Certainly some of the synonyms cited by Linné appear to be *V. urticaefolia*, a species very readily distinguished by its slender stem, thin smooth leaves which are sharply serrate and long-acuminate, and its shorter racemes, on the slender pedicels of which are borne the short sepals and small pinkish corollas. Linné's description, in the use of the words "foliis rugosis dentatis," certainly does not describe *urticaefolia*, and moreover one can scarcely believe that he would have omitted characterization of the leaf-acumination. Sir J. E. Smith, in Rees Cyclop. 37: Art. Veronica, no. 58, describes the Linnean specimen and emphatically asserts its kinship to *V. Teucrium* L., not to *urticaefolia* Jacq. In the absence of citation to other specimens studied by Linné, the specimen of the Linnean Herbarium should stand as type. Sir J. E. Smith carefully contrasts this with *V. Teucrium* L., but study of the varying leaf-form of the latter confirms Bentham's view as to their identity.

Veronica Teucrium L., Sp. Pl. ed. II. 16. 1762. "Habitat in Germania." Linné possessed no specimen of this in his herbarium, which readily explains his describing as new a narrower-leaved form of this species than his own *V. latifolia*. The specific name is derived from "Teucii IV tertia species Clus. hist. 1 p. 349." L'Ecluse, Rar. Pl. Hist. 349. 1601, figures and briefly describes a plant, which is an ovate-leaved form of the species, and says that it grows "in herbosis collium jugis [Pannoniae Austriae Moraviae & Bohemiae]." Linné's description of his plant as with leaves "ovatis rugosis dentatis" shows the similarity of this to his own *latifolia*.

Roadsides, pastures and waste land, New Hampshire to Ontario, New Jersey and Ohio; introduced from Europe.

19. *VERONICA CHAMAEDRYS* L.

Veronica Chamaedrys L., Sp. Pl. 13. 1753. "Habitat in Europae pratis." The diagnosis is essentially taken from Linné, Fl. Suec. 5, no. 12. 1745, where the plant is stated to occur in Sweden "in pratis ubique." Evidently this is the species now considered. Several specimens from Sweden seen, one collected by Dr. W. A. Murrill at Upsala, July, 1902, being probably a topotype.

Roadsides and meadows, occasional from Prince Edward Island to Ontario, New Jersey and Ohio. Introduced from Europe.

20. *VERONICA JAVANICA* Blume.

Veronica javanica Blume, Bijdr. Fl. Nederl. Ind. 742. 1826. “Crescit in cacumine Sederato et ad cataractas fluvii Tjikundul montis Gede [Java].” The brief original description, especially in the phrase “spicis axillaribus,” would seem to denote the plant here considered. I have followed Sir J. D. Hooker, Fl. Brit. Ind. 4: 296. 1884, in adopting this name, as the only named specimen which I have for comparison, Griffith 3921 from East Himalaya distributed by Kew Gardens as “*Veronica Maddenii* Edg.,” is evidently this species. There is also a previously unnamed specimen, in Herb. New York Botanical Garden, from the Liu Kiu Islands.

Petropolis, Brazil, collected by J. Ball in 1882. Introduced from the Oriental Region.

21. *Veronica grandiflora* J. Gaertn.

Veronica grandiflora J. Gaertn. in Novi Comm. Acad. Petrop. 14: 531. pl. 18, f. 1. 1770. “Kamtschatkam pro patria sua in pratis alpinis, referente Stellero, copiose nascitur.” A full description, and a carefully drawn illustration, make the application of this name unmistakable, although the capsule is described as smooth (the word “laevis” however, not the word “glaber”). Apparently this was accidentally renamed by the younger Linné (Suppl. 83. 1781), who says of it: “*Veronica kamtschatica* Gaertner Act. petropol. Habitat in Kamtschatka.” Specimens, L. Stejneger 106, etc., seen from Bering Island, along the coast of Kamchatka.

Western Aleutian Islands (Kiska and Attu Islands). Also in Kamchatka.

Similar to, but much larger than, *Veronica aphylla* L., Sp. Pl. 11. 1753, of the Alps of Europe; differs by having its stems frequently 1 dm. long, its peduncles longer, its leaves 2.5–4 cm. long (not 1–2 cm. long), obovate and more acute, its corollas 8–9 mm. long (not 5 mm. long), and its style 8–9 mm. long, exserted, probably as long as the capsule (not 4 mm. long and only one-half to two-thirds length of capsule).

22. *VERONICA OFFICINALIS* L.

Veronica officinalis L., Sp. Pl. 11. 1753. “Habitat in Europae sylvestribus sterilibus.” Refers to Linné, Mat. Med. 4, no. 11. 1749; then to Linné, Fl. Suec. 4, no. 8. 1745, where the plant is said to occur in Sweden “frequens in sylvis praesertim exustis,” and its medical uses are mentioned. The Linnean specimens are more fully described by Sir. J. E. Smith in Rees Cyclop. 37: Art. *Veronica*. no. 53. 1819. Specimen in Herb. New York Botanical Garden, collected at Upsala, Sweden, July, 1902, by Dr. W. A. Murrill, is probably a topotype.

Fields, barrens and open woods, mostly common; from Newfoundland and Michigan to North Carolina and Tennessee. Apparently introduced from Eurasia, although usually in seemingly native habitats.

23. *VERONICA BECCABUNGA* L.

Veronica Beccabunga L., Sp. Pl. 12. 1753. "Habitat in Europa ad rivulos." Diagnosis quoted from Linné, Fl. Suec. 5. no. 11. 1745, where it is stated that in Sweden the plant "habitat in fossis, rivulis, scaturiginibus passim," and that it is the "*Beccabungae Herba Conserva, Aqua*" of the Pharmacopeas.

Running brooks, ditches and wet fields, well established in Quebec, also at Rochester, New York and Perth Amboy, New Jersey. Introduced from Eurasia, where this species is as wide-spread as on this continent is the following near relative.

24. *Veronica americana* Schwein.

Veronica Beccabunga americana Raf., Med. Fl. 2: 109. pl. 94. 1830. "Grows from Canada to Virginia and Kentucky, near waters, brooks, &c." Well described, and contrast given with *V. Beccabunga* as understood by Rafinesque. Apparently this plant was independently redescribed under this name by Torrey in Fl. New York 2: 41. 1843, whose type I have seen in Herb. Columbia University.

Veronica americana Schwein.; Benth. in DC. Prod. 10: 468. 1846. "*Veronica americana* (Schweinitz! mss.) In America boreali a Canada et Carolina usque ad flum. Oregon et in ins, Sitcha (v. s.)" Specimen seen in Herb. Academy of Natural Sciences of Philadelphia, labeled "Bethl." [= Bethlehem, Pennsylvania], collected by Schweinitz, may be an isotype. Well contrasted with *V. Beccabunga* L., instancing leaf-form and more erect habit.

Veronica americana hirsuta Coleman, Cat. Fl. Pl. S. Michigan 27, 1874. "Southern peninsula of Michigan." Described as "plant quite large, 24 to 30 inches high, very hirsute." I have never seen a pubescent form of this species, and Coleman's specimen, if extant, should be studied.

Veronica americana crassula Rydb. in Mem. New York Bot. Gard. 1: 353. 1900. "In bogs, at an altitude of 2000-2500 m. Montana: Little Belt Pass, 1896, Flodman, 778 (type)." Type seen in Herb. New York Botanical Garden. This represents the dwarfed alpine state of the species, which may better be considered a forma.

Veronica oxylobula Greene, Pittonia 5: 113. 1903. "Type specimens from Golden City, Colorado, collected by myself in 1871." Supposed to be distinguished by "its entire or subentire foliage and the longer and almost acute capsules," features of variability within this species.

Veronica crenatifolia Greene, l. c. 114. 1903. “The type . . . is Baker, Earle and Tracy’s n. 33, from along the Mancos River in southern Colorado, 22 June, 1898.” Isotypes seen in Herb. New York Botanical Garden and U. S. National Herbarium. Apparently supposed to be distinguished by its smaller size and crenate leaves, variations frequent in *V. americana*.

Swamps, springs and woodland rills, from Newfoundland, Ontario and Alaska, south, eastward to South Carolina and Tennessee, westward to Chihuahua, California, and the Valley of Mexico; also on the Commander Islands on the western side of Bering Sea. Generally common over this wide area.

Veronica americana appears to be only inconstantly distinguishable from *V. Beccabunga* by its leaf-form and more erect habit. The leaf is mostly narrower, widest near the truncately rounded or subcordate base, narrowing to the acute or obtuse apex, and borne on frequently shorter pedicels. The capsule-shape is the same, nearly globose, flattened and emarginate at apex, the corolla, sepals and pedicels are of about the same length as in that species, but the last are usually more slender. The styles are longer and usually more slender in *americana*. The leaves vary from serrate through crenate to nearly or quite entire.

25. *Veronica Anagallis-aquatica* L.

Veronica Anagallis-aquatica L., Sp. Pl. 12. 1753. “Habitat in Europa ad fossas.” Description quoted from Linné, Fl. Suec. 5, no. 10. 1745, where the plant is stated to occur in Sweden “in fossis ad vias & paludes Uplandiae, Scaniae &c.” Described with leaves serrate, and with citations to Tournefort and Bauhin who both term the leaves oblong. The Swedish plant is well described by Nyman, Utkast Sv. Vaxt. Naturh. Sver. Fanerog. 164. 1867, who tells us that its leaves are lanceolate or oval-lanceolate, pointed, and its capsules are rounded, very shallowly notched. All which indicates the present broad-leaved plant with scarcely or not notched capsules, not another plant of northwestern Europe which has elongate acuminate leaves, and capsules decidedly notched, as broad as or broader than long. Our plant has the lower leaves and those of autumnal shoots narrowed or petioled at the base, a condition mentioned in such exact descriptions as Hayek, Fl. Steiermark 2: 168. 1912; also the short round form of these autumnal leaves is mentioned in Villars, Hist. Pl. Dauphine 2: 14. 1787.

Veronica lepida Phil. in Anal. Univ. Chile 91: 110. 1895. “Habitat ad Vicum Cartajena (haud procul a Valparaiso [Chile]), Febrero, 1895 lecta.” Described because the petioled lower leaves were noticed.

Veronica micromera Wootton & Standley in Contrib. U. S. Nat. Herb. 16: 174. 1913. "Type in the U. S. National Herbarium, no. 686250, collected along ditches about Shiprock, on the Navajo Reservation [New Mexico], July 25, 1911, by Paul C. Standley (no. 7283). Altitude 1,425 meters." Type seen in U. S. National Herbarium. A dwarf form, with small leaves which are more obviously narrowed at base.

Slow-flowing streams, wide-spread through North and South America; specimens seen from Michigan, Utah, New Mexico, Arizona, Argentina and Chile. Also of wide occurrence in Eurasia; specimens seen from Germany, Switzerland, Italy, Albania, Algeria and Syria. Of this critical species-group this is the most widely dispersed and probably the original element.

25a. *Veronica Anagallis-aquatica Brittonii* (Porter) Pennell, comb. nov.

Veronica Anagallis latifolia Britton in Bull. Torr. Bot. Club 12: 49. 1885. "In the latter part of September, 1883, . . . near Mahwah, Bergen Co., New Jersey, I noticed [it] in a small stream . . . Type seen in Herb. Columbia University. Not *V. Anagallis latifolia* Schultz, Prod. Fl. Stargard. Suppl. 3. 1819 (which is *V. Anagallis-aquatica* L.).

Veronica Brittonii Porter; Pennell in Torrey 19: 168. 1919. "Type, base of Marble Hill, above Phillipsburg, New Jersey, collected in flower and fruit June 24, 1892, T. C. Porter; in herbarium Columbia University at the New York Botanical Garden."

Slow-flowing streams, western Connecticut to northern Pennsylvania. For list of localities see Torrey 19: 170. 1919.

Perhaps not worthy of even varietal distinction.

26. *Veronica glandifera* Pennell

Veronica perfoliata Raf., New Fl. Am. 4: 37. 1838. "Florida." Description almost certainly of the plant now considered, which however is not authentically known from so far south. The clasping opposite leaves of *V. glandifera*, till closely seen, appear connate. Not *V. perfoliata* R. Br., 1810.

Veronica glandifera Pennell in Torrey 19: 170. 1919. "Type, vicinity of Suffolk, Nansemond County, Virginia, collected in flower and fruit, May 27, 1893, N. L. Britton and J. K. Small; in herbarium Columbia University at the New York Botanical Garden." Pa. Acad. Sci. 34, 151, 1932.

Slow-flowing streams, in limestone, Virginia and Ohio to North Carolina and Tennessee. Perhaps intergrades with *V. catenata glandulosa*.

The petioled leaves of late-summer shoots are well shown, on specimens of Bruce Fink 262 from Oxford, Ohio, collected August 8, 1908.

While in pubescence this species parallels Palaearctic derivatives of *Veronica Anagallis-aquatica* L., I am unable to place our plant of eastern North America as of the same species as any of these. Such species are: *V. anagalloides* Guss., Pl. Rar. Sic. 5. pl. 3. 1829, which has a capsule decidedly longer than wide, and not or scarcely emarginate; *V. oxycarpa* Boiss., Diagn. I. 7: 44. 1846, with acute capsule and leaves narrowed at base; and *V. salina* Schur, Enum. Pl. Transsilv. 492. 1866, very similar to *V. anagalloides*.

27. *Veronica catenata* Pennell, sp. nov.

Flowering stem 1–3 dm. long, glabrous throughout. Leaves lanceolate, acute or acutish, crenate to nearly entire, 3–5 cm. long, 1 cm. wide, all clasping, when submersed elongating and reaching 12 cm. long and 2 cm. wide. Racemes axillary to the upper leaves, 6–12 cm. long, 15–25-flowered. Bracts narrowly lanceolate, 4–5 mm. long. Pedicels 3–5 mm. long, glabrous. Sepals 3–3.5 mm. long, lance-ovate, obtusish. Corolla-lobes pale-blue. Style 1.2–1.7 mm. long. Capsule 3 mm. long, 3.5 mm. wide, broad-globose, decidedly emarginate. Seeds 0.5 mm. long, yellow-brown.

Type, Hot Springs, South Dakota, collected in flower and fruit June 16, 1892, P. A. Rydberg 926, in Herb. New York Botanical Garden. Named from the chain-like aspect of the long racemes of short-pedicelled flowers.

Slow-flowing streams, plains, from North Dakota and Saskatchewan to Kansas and New Mexico, southward west to Nevada and southern California.

27a. *Veronica catenata glandulosa* (Farwell) Pennell, comb. nov.

Veronica Anagallis-aquatica glandulosa Farwell in Rep. Mich. Acad. Sci. 19: 249. 1917. “Zoo Park, near Royal Oak [Michigan], [Farwell] No. 4323, July 13, 1916.” Not *V. Anagallis-aquatica glandulosa* Schur, Enum. Pl. Transsilv. 492. 1866. Description inadequate, but apparently of the plant now considered. As this is a small plant and moreover is the only glandular-pubescent “*Anagallis-aquatica*” known from Michigan, I apply the name to this.

Slow-flowing streams, western New York to Minnesota, South Dakota, Kentucky and Oklahoma; also in western Massachusetts and in southeastern and southern Pennsylvania. Probably intergrades with *V. glandifera*, and for the latter, in *Torreya* 19: 170, I have mistaken plants of our New York “Local Flora.”

28. *VERONICA UNDULATA* Wall.

Veronica undulata Wall.; Roxb., Fl. Ind. 1: 147. 1820. “Discovered in the Turraye [India] by Mr. W. Jack.” Specimen in Herb. Columbia University, labeled “Nepal Wallich,” may be an isotype.

Ballast, Portland, Oregon, and Mobile, Alabama. Introduced from southeastern Asia, where it occurs from northern India through southern China, and in Japan.

Occasionally nearly or quite glabrous, but then readily distinguished by the small size of the capsule and style.

29. *Veronica scutellata* L.

Veronica scutellata L., Sp. Pl. 12. 1753. "Habitat in Europae inundatis." Diagnosis quoted from Linné, Fl. Suec. 4. no. 9. 1745, where the plant is said to grow in Sweden "in locis per hyemem inundatis frequens." Evidently the plant now considered.

Veronica uliginosa Raf. in Am. Mo. Mag. 2: 175. 1818. "*Veronica scutellata* Pursh Fl. Am. Sept. 1: 11." In his Fl. Am. Sept. 11. 1814, Pursh states of "*Veronica scutellata*" that "the American plant has longer leaves than any of the European specimens I have seen," a condition not verified by the material at hand to-day though Pursh's statement evidently misled Rafinesque into assuming for it specific distinctness.

Veronica connata Raf., Med. Fl. 2: 110. 1830. "In west Kentucky." Very briefly characterized and leaves said to be "connate;" surely they were merely cordate-clasping and opposite.

Meadows and swales, Newfoundland and Yukon to Virginia, Indiana, Wyoming, and California.

Occasionally occurs in a form more or less pubescent throughout, forma **villosa** (Schumacher) Pennell [*Veronica scutellata villosa* Schumacher, Enum. Pl. Saell. 1: 7. 1801; also *V. scutellata pilosa* Vahl, Enum. Pl. 1: 70. 1805; *V. scutellata pubescens* Koch, Syn. Fl. Germ. et Helv. 524. 1837.]. This occurs sporadically occasional throughout the range of the species.

III. **HEBE** Commerson

Hebe Comerson; [Juss., Gen. Pl. 105. 1789, generic diagnosis only;] J. F. Gmelin, Syst. Nat. 2: 27. 1791. Type species, *Hebe magellanica* J. F. Gmel.

Leaves lanceolate, acuminate to a small blunt tip, entire, not revolute, 6-7 cm. long. Racemes 5-13 cm. long, many-flowered. Sepals acuminate, 2-3 mm. long. Corolla with the oblong lobes shorter than or but little longer than the narrow tube. Stamens and style longer than the corolla and conspicuously exserted, the latter slender, 5-6 mm. long. Capsule oval in outline, relatively thin-walled. Stem minutely pubescent when young, especially between and proximad to bases of leaves, becoming glabrate; bark slightly wrinkled in drying.

Racemes 13 cm. long; rachis, pedicels and lanceolate sepals finely pubescent. Corolla 5 mm. long, its lobes slightly shorter than the tube. Leaves attenuate-acuminate. Internodes on flowering shoots about 3 cm. long. 1. *H. salicifolia*

Racemes 5-7 cm. long; rachis, pedicels and lance-ovate sepals puberulent. Corolla not seen. Leaves narrowing to a blunt tip. Internodes on flowering shoots less than 1 cm. long. 2. *H. blanda*

Leaves elliptic-oval, apiculate, the margin revolute, callose, and at times obscurely crenate, 2-3 cm. long. Racemes 2 cm. long, few-flowered. Sepals acute to obtuse, 4 mm. long. Corolla 8 mm. long, the broadly ovate lobes much longer than the broad tube. Stamens not longer than the corolla, the stout style 4 mm. long. Capsule elliptic-oval in outline, thick-walled. Stem densely and persistently pubescent with pale hairs on side between and proximad to bases of leaves, below leaf-bases reddish, glabrous and shining; bark much wrinkled in drying. 3. *H. elliptica*

1. *Hebe salicifolia* (Forst.) Pennell, comb. nov.

Veronica salicifolia Forst., Fl. Ins. Austr. Prod. 3. 1786. “[Noua Zeelandia, G. Forster].” Several specimens from New Zealand seen, and one collected by A. H. Cockayne 8041, and labeled “*Veronica salicifolia* Forst. Typical South Island form,” shows precisely the slender finely pubescent pedicels, small flowers, and acuminate, almost attenuate leaves of our plant. Type species of genus *Panoxis* Raf., Med. Fl. 2: 109. 1830.

Veronica Fonkii Phil. in Linnaea 29: 110. 1857-8. “En las playas y barrancas de Chonos,’ in litore et valleculis, legit Dr. Fr. Fonk.” Specimen in Herb. Columbia University, labeled “*Veronica Fonki* Ph. Chonos, legit Philippi, com. am Treviranus 1864,” is doubtless an isotype. This seems to be the same as the plant of New Zealand.

Chonos, Chile. Also in South Island, New Zealand.

2. *Hebe blanda* (Cheesem.) Pennell, comb. nov.

Veronica amabilis blanda Cheesem., Man. New Zealand Fl. 506. 1906. “Port Chalmers [Otago, South Island, New Zealand] Petrie!” Specimen in Herb. New York Botanical Garden, collected at Anita Bay, Otago (where it forms “a considerable part of the ‘coastal Scrub’”) appears to be exactly our plant, and to agree with Cheeseman’s variety.

Southern Patagonia. Also in South Island, New Zealand.

3. *Hebe elliptica* (Forst.) Pennell, comb. nov.

Veronica elliptica Forst., Fl. Ins. Austr. Prod. 3. 1786. “[Noua Zeelandia, G. Forster],” Several specimens from New Zealand seen, two from Port Otway and Tuesday Bay respectively, agreeing exactly with our plant. Also a specimen from the Auckland Islands, Wilkes Expedition, is quite the same.

x *V. franciscana* Eastw. wetigen. Leagl. W. Bot.
3: 220-2, 1943.

Veronica decussata [Soland. in] Ait., Hort. Kew. 1: 20, 1789. "Nat. of Falkland Islands. Introd. 1776, by John Fothergill." Described as with bracteoles on pedicels, an appearance probably caused by the terminal bractlets of the raceme appearing, while the bud of the rachis is suppressed.

Hebe magellanica J. F. Gmel., Syst. Nat. 2: 27. 1791. Based upon *Hebe* Juss., Gen. Pl. 105. 1789, where the name is attributed to Commerson and the plant said to be from Magellan. Evidently collected by Commerson at the Straits of Magellan in 1767-8.

Veronica Simpsonii Phil. in Anal. Univ. Chile 1873: 26. 1873. "Enrique Simpson trajo de las orillas del rio Aysen, en Patagonia." The careful description of the branch, leaves, fruiting inflorescence, capsules and seeds appears to denote the species now considered.

Southern Patagonia and Falkland Islands. Also in the Auckland Islands and South Island of New Zealand.

NOMINA EXCLUDENDA.

Veronica caroliniana Poir., Encyc. Meth., Bot. 8: 520. 1808. "Communiquée par M. Bosc, qui l'a recueillie dans la Caroline." This is *Cynoctonum Mitreola* (L.) Britton, of the Loganiaceae. Not *V. caroliniana* Walt., 1788.

Veronica cinerea Raf., New Fl. Am. 4: 39. 1838. "From Origen." Description of plant as "cinereous villose, leaves alternate . . . flowers spicate very dense sessile . . . stamens very long" appears to denote some species of *Synthyris*.

Veronica fluminensis Vell., Fl. Flum. 11. 1825; Icones 1: pl. 25. 1827. "Abunde provenit locis umbrosis ad vias maritimas Regii Praedii Sanctae Crucis [Brazil]." Description and illustration show a plant of the Acanthaceae.

Veronica litoralis Vell., Fl. Flum. 10. 1825; Icones 1: pl. 24. 1827. "Silvis maritimis Regii Praedii Sanctae Crucis [Brazil] prope litus, ad loca arenosa habitat." Description and illustration show a plant of the Acanthaceae.

Veronica marilandica L., Sp. Pl. 14. 1753. "Habitat in Virginia." According to B. D. Jackson (in Proc. Linn. Soc. 14. Suppl.: 150. 1912), Linné transferred his specimen bearing this name to *Polypremum procumbens* L. Both his description and that in Gronovius' Fl. Virg. 4. 1739, indicate this plant of the Loganiaceae. I cannot locate the reference which is erroneously cited as: "*Veronica marilandica* Murr. Comm. Gotting. 11: t. 3. 1782."

Veronica missurica Raf. in Am. Monthly Mag. 3: 175. 1818. New name for *Veronica reniformis* Pursh, which was a species of *Synthyris*. See below.

Veronica Purshii G. Don, Gen. Hist. Dichl. Pl. 4: 573. 1838. "Native on the banks of the Missouri. *V. reniformis* Pursh . . . , but not of Rafin." A species of *Synthyris*. See below.

Veronica reniformis Pursh, Fl. Am. Sept. 1: 10. 1814. "Collected by Messrs. Lewis and Clark in boggy soil, on the banks of the Missouri . . . v. s. in Herb. Lewis." Type was apparently a plant collected on Hungry Creek, in what is now Montana, June 26, 1806, and an isotype of this in the Herbarium of the Academy of Natural Sciences of Philadelphia was determined by Robinson and Greenman [in Proc. Acad. Nat. Sci. Phila. 1898: 39. 1898] as *Synthyris reniformis major* Hook. Pursh's description is inaccurate, but I think must certainly apply to this collection which is the species, *S. major* (Hook.) Heller.

Veronica rotundifolia Ruiz & Pavon, Fl. Peruv. et Chil. 1: 6. 1798. "Habitat copiose in Peruviae uliginosis ad Pillao vicum." This is a species of *Sibthorpia*.

Veronica sparsiflora Raf., Atl. Jour. 79. 1832. Described from a plant in the Bartram Botanical Garden, Philadelphia, Pa., which was said to have been "native of Arkansas or Texas, received from Prof. Nuttall." I know of no American species at all fitting this description: "stem erect, simple round solid, leaves opposite sessile cuneate oblong entire obtuse. Raceme terminal lax very long, flowers scattered, bracts linear oblong obtuse, pedicels filiform. Capsules bilobed subcompressed. Annual Stem 1 or 2 feet high. Flowers vernal purpureous handsome. Corolla rotate, segments of the calix unequal oblong, obtuse" Is it a foreign species, or not a *Veronica*?

NEW YORK BOTANICAL GARDEN.

AN ESTUARIAN VARIETY OF *SCIRPUS SMITHII*.

NORMAN C. FASSETT

WHILE examining material of *Scirpus Smithii* Gray, collected last August on the banks of the Cathance River at Bowdoinham, Maine, the writer found that all the individuals from that locality had achenes with a perianth of bristles which differed from those of var. *setosus* Fernald by their complete lack of barbs. Material from Back River Creek in Woolwich and from the Androscoggin River at Brunswick proved on examination to have similar smooth bristles about the achene. The length of the bristles, moreover, instead of being uniform and greater than that of the achenes, as in var. *setosus*, was variable even on the same achene, and while an occasional bristle exceeded it, this was not common, and there were no cases in which all the bristles exceeded the achene. The number of bristles was also

more variable, ranging from two to six, instead of from four to five as in var. *setosus*. The color of the achenes, running from almost black to almost white in *S. Smithii* and its variety with barbed bristles, darker toward the base of the spikelet (a matter, doubtless, of degree of maturity), in this case varied greatly, but seemed to average lighter than in the other forms of the species, the deep brown never reaching the almost ebony shades of the common types.

This condition of smooth-bristled varieties in the *Cyperaceae* frequently occurs, as for example in *Rynchospora capitellata* (Michx.) Vahl., var. *discutiens* (Clarke) Blake, and in *R. capillacea* Torr., var. *leviseta* E. J. Hill. *Eleocharis Engelmanni* Steud., var. *detonsa* Gray has the bristles absent, or when present smooth and reduced to mere rudiments, but they are variable and may even in some cases exceed the achene, in this variability being more closely parallel with the estuarian *Scirpus* than are the two *Rynchosporas*.

This new plant exhibiting these characters comes from a locality which has already produced some remarkable species.¹ Many of the rivers of Sagadahoc County have their mouths drowned twice a day by the rising tide, producing muddy estuaries. Merrymeeting Bay, a few miles above Bath, has no salt water, but has a strong tide which extends far up the five rivers which enter it, including the Kennebec, the Androscoggin, and the Cathance. Thus along their banks there is left uncovered twice a day a wide stretch of mud, upon which a rank vegetation flourishes. Then, when the muddy and somewhat brackish water is forced back by the rising tide, these flats are covered to a depth of several feet. Back River Creek, a stream which has a similar estuary on a much smaller scale, is separated from this system by a short stretch of salt water, but it is not surprising to find this little sedge there also. Indeed there is another estuarian plant which is apparently confined to these same localities: *Bidens Eatoni* Fernald, var. *kennebecensis* Fernald was collected at Cathance River and at Back River Creek by Professor Fernald and Mr. Bayard Long in 1916, and has not been observed anywhere else.

This new phase of *Scirpus Smithii* may well take the name of:

SCIRPUS SMITHII Gray, var. *levisetus*, n. var., setis 2-6, levibus vel rare subscabris, 0.5-2 mm. longis, achenio castaneo plerumque brevioribus.

¹ See RHODORA 19: 91. 1917.

The 2-6 bristles perfectly smooth or rarely slightly roughened, 0.5-2 mm. long, mostly shorter than the chestnut-brown achene.—MAINE: border of salt-marsh, Back River Creek, Woolwich, Sept. 15, 1916, *Fernald & Long*, no. 12830; tidal mud-flats of the Cathance River, Bowdoinham, Sept. 14 & 19, 1916. *Fernald & Long*, no. 12829; Brunswick, Aug. 6, 1894, *C. A. Davis*; muddy bank of the Androscoggin River, Brunswick, Sept. 15, 1904, *Kate Furbish*; tidal flats of the Cathance River at Bowdoinham and at its mouth in Merry-meeting Bay, Aug. 25-Sept. 2, 1920, *Fassett* (TYPE in Gray Herb.).

HARVARD UNIVERSITY.

EQUISETUM FLUVIATILE OR E. LIMOSUM ?

M. L. FERNALD AND C. A. WEATHERBY.

FOR nearly fifty years before the publication, in 1893, of the *List of Pteridophyta and Spermatophyta of Northeastern North America*, the common horsetail of our marshes and river-shores was universally known to American botanists as *Equisetum limosum* L. In that work, the first attempt to apply the provisions of the American Code, the name *E. fluviatile* was substituted. This change was made because the species, as now and for more than a century understood, includes both *E. limosum* and *E. fluviatile* of Linnaeus and of the two names, published on the same page of the *Species Plantarum*, the latter has priority of position and had to be taken up under Canon 13 of the American Code. A. A. Eaton adopted it in his treatment of the North American Equiseta in the Fern Bulletin and in the seventh edition of Gray's *Manual*; and it is now nearly as generally used in America as was its predecessor twenty years ago. In Europe, however, the great majority of authors have retained *E. limosum*. This circumstance and the further fact that the International Rules do not admit priority of position in cases where two groups of the same rank, published at the same time, are united, but require the retention of that one of the two names chosen by the author who first suggests the union, raise the question whether, after all, *E. fluviatile* is the correct name.

In order to answer this question satisfactorily, it is necessary to consider in some detail the nomenclatorial history of the species. *E. fluviatile* first appears in the *Flora Lapponica*, 310 (1737). Its identity is fixed by the existence in Linnaeus' herbarium of a speci-

men in his possession in 1753 and labelled by him with the descriptive phrase assigned to *E. fluviatile* in the *Species Plantarum*.¹ To this Linnaeus added in the *Flora Suecica*, 305 (1745) another species, "Equisetum caule nudo laevi." He retained both in the *Species Plantarum*, giving to the latter the specific name *limosum*. This treatment seems to have been generally accepted by European authors for some thirty years, the name *fluviatile*, however, being often applied to *E. Telmateia* Ehrh., an error which Linnaeus had made possible by citing under *E. fluviatile* synonyms from Bauhin and Haller applicable to *E. Telmateia*. Ehrhart in 1783² clearly pointed out that *E. fluviatile* and *E. limosum* of Linnaeus were branched and unbranched forms of the same species and formally united them; unfortunately, however, giving to the aggregate the new and wholly needless name *E. Heleocharis*. Ehrhart's union of *E. limosum* and the real *E. fluviatile* has been accepted by the majority of authors since,³ though the name *fluviatile* long continued to be applied in various works⁴ to *E. Telmateia*. Roth in 1800 (*Tent. Fl. Germ.* iii. 9) correctly united the two under the name *E. limosum*, citing as synonyms *E. fluviatile* and *E. Heleocharis*, though, curiously, he took the branched form as typical and made a varietal name for the true typical form. A few authors, especially among the Scandinavians, have employed the name *E. fluviatile* for the united species, but G. F. W. Meyer, in 1836,⁵ seems to have been the first formally to reduce *E. limosum* to varietal status under it.

It appears, then, that Roth was the first to unite *E. limosum* and *E. fluviatile* under a tenable name and that, according to the International Rules, the name which he chose, *E. limosum*, must stand.

As stated by Eaton⁶ there appear to be no true varieties of this species in America. Its variants, though often striking in aspect, not only intergrade freely, but occur commonly in the same colonies throughout a similar range and sometimes even on the same rootstock. Meyer and Milde considered the simple and branched forms as seasonal states or due to the depth of water in which they happened

¹ Fide Vaucher, *Monog. des Prêles*, 45 (1822); Milde, *Monog. Equiset.* 256 (1865); Jackson, *Index to the Linnean Herb. Proc. Linn. Soc.*, no. 124, Suppl. 72 (1912).

² *Hannov. Mag.* (1783), Stueck 18, 286, according to Roth, *Beitr.*, il. 158 (1788).

³ See, for instance, Schkuhr, *Krypt. Gew. t.* 171 (1809) where both are figured on the same plate under the name *E. limosum*.

⁴ Milde, *Monog. Equiset.* 257 (1865) gives a long list of them.

⁵ *Chloris Hanov.* 668 (1836).

⁶ *Fern Bull.*, x. 73 (1902).

to grow: here, however, both may develop side by side. The plant here treated as *f. minus* seems at first sight to have varietal characters. But these characters re-appear in basal branches of typical *E. limosum*; and Eaton, in a note on one of the sheets in the herbarium of the New England Botanical Club, states that he has observed this form to be produced where a freshet had deposited sand on a bed of typical plants and that, after some years, it reverted to the typical form. It seems best, therefore, to consider it as a reduced ecological state of *E. limosum*.

The more striking forms, which seem to deserve some recognition, are given, with their synonymy, below.

Culms simple or merely with a few solitary or scattered, commonly long and strongly ascending branches.

Culms stout, 3.5–7.5 mm. in diameter in dried material; sheaths of mature primary culms usually closely appressed, their linear-lanceolate teeth mostly over 2 mm. long and black for their whole length. 1. *E. limosum*.

Culms slender, 1.5–3 mm. in diameter in dried material; sheaths usually rather loose, their teeth deltoid-lanceolate, mostly less than 2 mm. long and black only in the upper half. 2. *f. minus*.

Culms with definite whorls of 4–16 slender ascending or spreading branches from the median and upper nodes.

Branches sterile. 3. *f. verticillatum*.

Branches, or some of them, bearing strobiles at their apices. 4. *f. polystachium*.

1. *EQUISETUM LIMOSUM* L. Sp. Pl. 1062 (1753). *E. Heleocharis* Ehrh. Hannov. Mag. (1783) Stueck 18, 286, acc. to Roth, Beitr. ii. 158 (1788). *E. limosum* β . *aphyllum* Roth, Tent. Fl. Germ. iii. 9 (1800). *E. fluviatile*, "Spielart" a. *praecox* G. F. W. Mey. Chloris Hanov. 668 (1836). *E. fluviatile simplex* Rupr. Symb. 92 (1845). *E. fluviatile* limosum* Hartm. Skand. Fl. ed. 5, 216 (1849). *E. limosum* α . *genuinum* Gren. & Godr. Fl. Fr. iii. 644 (1855). *E. limosum*, *f. Linnaeanum* Doell, Fl. Baden, 64 (1857). *E. limosum*, var. *simplex* Milde, Gefaess-Crypt. Schlesiens, 448 (1858). *E. limosum*, var. *Linnaeanum* Milde, Monog. Equiset. 342 (1865). *E. fluviatile* β . *limosum* Hartm. Skand. Fl. ed. 11, 548 (1879). *E. Heleocharis*, *f. limosum* Klinge, Arch. Naturf. Soc. Dorpat, Ser. 2, viii. 410 (1882). *E. Heleocharis*, *B. limosum* Aschers. & Graebn. Syn. Mitteleur. Fl. i. 136 (1896).—Labrador to Alaska, so. to New York, Indiana, Illinois, Wyoming and Washington.

2. Forma *MINUS* A. Br. in Doell, Rhein. Fl. 30 (1843).¹ *E. uliginosum* Muhl. in Willd. Sp. Pl. v. 4 (1810). *E. limosum* β . *minus* A. Br. Am. Journ. Sci. xlv. 86 (1844). *E. limosum*, var. *uliginosum* Milde, Monog. Equiset. 343 (1865). *E. Heleocharis*, *f. uliginosum*

¹ The form is here published without author citation as if it were Doell's own; but in the Fl. Baden he attributes it to Braun.

Klinge, Arch. Naturf. Soc. Dorpat, ser. 2, viii. 411 (1882). *E. Heleocharis*, B. *limosum*, f. *uliginosum* Aschers. & Graebn. Syn. Mitteleur. Fl. i. 136 (1896). *E. fluviatile*, var. *uliginosum* A. A. Eaton, Fern Bull. x. 73 (1902). *E. limosum*, f. *Linnaeana*, subf. *minor* Dalla Torre & Sarntheim, Fl. Tirol, vi. 74 (1906). *E. limosum* α . *Linnaeanum* sub-var. *minus* Rouy, Fl. Fr. xiv. 500 (1913).—MAINE: springy places, Ft. Kent, June 15, 1898, *Fernald*, no. 2191; gravelly river-bank, Ft. Fairfield, July 7, 1893, *Fernald*, no. 200; sandy shores, Grand Isle, June 20, 1898, *Fernald*, no. 2194; in an old well, Orono, July 6, 1892, *Fernald*; margin of river, Winn, July 10, 1916, *Fernald & Long*, no. 12,315. VERMONT: shore of Winooski River, alt. 270 ft., Essex Junction, 25 July, 1911, *Blake*, no. 2190. MASSACHUSETTS: sandy pools, Amesbury, May 30, 1897, A. A. Eaton, no. 47; June, 1902, A. A. Eaton, no. 48. ILLINOIS: Chicago, N. L. T. Nelson. YUKON: Dawson, June 19, 1914, *Eastwood*, no. 309. Muhlenberg's *E. uliginosum* came from Pennsylvania and Braun cites the form as collected in Newfoundland by La Pylaie.

3. Forma VERTICILLATUM Doell, Fl. Baden, 64 (1857). *E. fluviatile* L. Sp. Pl. 1062 (1753), excl. syn. Hall. and Bauhin. "Afart" *E. limosum fluviatile* Hornem. Dansk Oeconomik Plantelaere, 345 (1837). *E. limosum*, formae *brachycladon* and *leptocladon* Doell, Rhein. Fl. 30 (1843). *E. limosum* β . *ramosum* Gren. & Godr. Fl. Fr. iii. 644 (1855). *E. limosum*, vars. *verticillatum* and *attenuatum* Milde, Gefaess-Crypt. Schlesiens, 448 (1858). *E. Heleocharis*, 2 *fluviatile* Klinge, Arch. Naturf. Soc. Dorpat, ser. 2, viii. 412 (1882). *E. limosum*, "var. *E. fluviatile*" Baker, Handb. Fern Allies, 4 (1887). *E. Heleocharis*, A. *fluviatile* Aschers. & Graebn. Syn. Mitteleur. Fl. i. 135 (1896). *E. fluviatile*, var. *verticillatum* A. A. Eaton, Fern Bull. x. 73 (1902). *E. limosum*, f. *fluviatilis* (with subformae *brachyclada*, *leptoclada* and *attenuata*) Dalla Torre & Sarntheim, Fl. Tirol, vi. 74 (1906).—Newfoundland to the Yukon, so. to Delaware, Indiana, Wisconsin, Nebraska, Idaho and Oregon.

Although the earliest name in the formal category applied to this plant is f. *brachycladon* Doell, we have felt justified in taking up the earliest formal name applied to the group as we define it. F. *brachycladon* applies only to a single, short-branched phase of our form, hardly worth any recognition; the name, as indicating the contrast between the branched and unbranched forms, is so inappropriate as to be misleading; and it and its companion *leptocladon* were reduced by Doell himself in his Fl. Baden to sub-forms under his f. *verticillatum*. There seems no reason for upsetting his more mature and obviously correct treatment, which has been accepted by practically all subsequent authors.

E. fluviatile intermedium A. A. Eaton in Gilbert, List N. Am. Pterid. 8, 26 (1901) appears, from the scanty material at hand, to be only stunted f. *verticillatum*.

4. Forma POLYSTACHIUM (Brückn.) Doell, Fl. Baden, 65 (1857), where wrongly ascribed to Lejeune, Fl. Spa. ii. 274 (1813). *E. polystachium* Brückn. Fl. Neobrand. Prod. 63 (1803). *E. limosum polystachion* Seringe in Vaucher, Monog. des Prêles, 44 (1822). *E. limosum*, β . *Candelabrum* Hook. Fl. Bor.-Am. ii. 269 (1840). *E. limosum*, γ . *polystachyum* A. Br. Am. Journ. Sci. xvi. 86 (1844). *E. Heleocharis*, f. *polystachyum* Klinge, Arch. Naturf. Soc. Dorpat, ser. 2, viii. 411 (1882). *E. Heleocharis*, *A. fluviatile*, f. *polystachyum* Aschers. & Graebn. Syn. Mitteleur. Fl. 136 (1896). *E. fluviatile*, var. *polystachyum* A. A. Eaton, Fern Bull. x. 74 (1902). *E. limosum*, f. *fluviatilis*, subf. *polystachya* Dalla Torre & Sarntheim, Fl. Tirol, 74 (1906).—Specimens have been seen from Nova Scotia, Maine and Michigan: there are reports from Manitoba (β . *Candelabrum* Hook.), Oregon (Am. Fern Journ. ix. 104) and Washington (Fern Bull. x. 74).

GRAY HERBARIUM.

HERBARIUM OF REV. W. P. ALCOTT.—On a recent visit to the Peabody Academy of Sciences in Salem I was much pleased to find there the entire herbarium of the late Rev. W. P. Alcott. This is a recent acquisition which is of great value. Mr. Alcott built up a general American collection of a few hundred sheets by collecting and exchange, and he had several other smaller collections from different parts of the world.

Most interesting of all to the local student is Mr. Alcott's collection of wool-waste plants, which he made during his pastorate at North Chelmsford, Massachusetts. There are many references to these plants in Dame & Collins's Flora of Middlesex County (1888). Now that this collection is accessible, practically all the citations in this Flora can be traced to actual specimens. Dr. C. W. Swan's herbarium at Yale University includes many of these Middlesex plants, and the others are in the Gray Herbarium or in that of the New England Botanical Club.—CLARENCE H. KNOWLTON, Hingham, Massachusetts.

AMELANCHIER AMABILIS, A NEW NAME. In the September number of this Journal (RHODORA, xxii. 149, 1920) the writer made the combination *A. grandiflora*. While the paper was in press the same name was proposed by Rehder (Journ. Arnold Arboretum, ii. 45, 1920) for a hybrid Amelanchier common in the Eastern United States. The name **A. amabilis** is, therefore, proposed to replace the name *A. grandiflora* antedated by the *A. grandiflora* of Rehder.—K. M. WIEGAND, Cornell University.

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Herbarium Supplies

CAT. 91,—BOTANICAL. CAT. 92,—BIOLOGICAL, SLIDES, ETC.

Microscopes

Accessories

Lenses

CAMBRIDGE BOTANICAL SUPPLY COMPANY

Laboratory . . .

WAVERLEY, MASS.,

Equipment

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